

## REMARKS

### I. Introduction

Applicants respectfully request reconsideration of the present application in view of the follow remarks.

### II. Status of the Claims

Claims 1-27 are pending. No claim is amended.

### III. The Office Action

Applicants gratefully acknowledge the PTO's indication that all of the claims distinguish over "the prior art." Office Action at page 5.

Yet the PTO maintained a sole rejection of claim 1 over claim 4 of commonly owned Application No. 10/388,173, now U.S. Patent No. 7,270,800 ("the '800 patent"), on grounds of obviousness-type double patenting. *Id.* at 2-4. In so doing, the PTO repeatedly invoked the novel proposition that "a double patenting rejection is made whenever applications contain overlapping subject matter." *Id.* at 2 and 3. Thus, despite the fact that cited claim 4 does not specify or suggest any locations for a radiohalogen on the recited species, the PTO seized upon the mere possibility that a radiohalogen could reside on the position corresponding to present variable R<sup>2</sup>. Because these facts under the correct rule of law compel an opposite conclusion, Applicants respectfully traverse the rejection.

#### A. The Legal Standard of Obviousness-Type Double Patenting

The issuance of claim 1 would not manifest an improper time-wise extension of the '800 patent because the claim is not an obvious variant of cited claim 4. In contrast to the PTO's formulation of the test to resolve this issue, well-settled law states that

[a] nonstatutory obviousness-type double patenting rejection is appropriate where the conflicting claims are not identical, but at least one examined application claim is not patentably distinct from the reference claim(s) because the examined application claim is either anticipated by, or would have been obvious over, the reference claim(s).

MPEP § 804(II)(B)(1) (citations omitted). Where, as here, “if the application at issue is the later filed application . . . a one-way determination of obviousness is needed in resolving the issue of double patenting.” *Id.* at 804(II)(B)(1)(a). Thus, “unless a claimed invention in the application would have been anticipated by, or obvious over a claimed invention in the patent, no double patenting rejection of the obvious-type should be made. *Id.* The analysis employed in an obviousness-type double patent determination parallels the guidelines for a 35 U.S.C. § 103(a) rejection and, hence, and it must apply the factual inquiries set forth in *Graham v. John Deere Co.*, 383 U.S. 1, 148 USPQ 459 (1966). *Id.* at 804(II)(B)(1).

In contrast to the detailed analysis that is required by the foregoing principles, the PTO here relied upon only possibilities and mere overlap of claim scope to reach a conclusion of obviousness-type double patenting. Were it to apply the correct standard, the PTO should have accounted for a number of important facts that would foreclose the PTO’s present conclusion, as explained below.

**B. The Method of Cited Claim 4 Points Away from the Genus of Claim 1**

Cited claim 4 is directed to a method that results in the replacement of any atom in one of the recited ‘cold’ species with one of several recited halogen isotopes. Because such an isotope could reside at many positions other than the one corresponding to present variable  $R^2$ , only a very small number of compounds resulting from the cited method could fall within the genus of present claim 1.

The PTO appears to concern itself with only this possibility. Still, its analysis does not account for a much more conspicuous result: the method of claim 4 could yield a *much larger group* of compounds, all falling outside the scope of claim 1, by virtue of halo-substitution at positions *other than the one corresponding to  $R^2$* . The great number and diversity of structural possibilities that obtain from cited claim 4 point away from the specific genus of rejected claim 1.

Further, the PTO did not articulate, and neither does claim 4 suggest, why a person of ordinary skill in the art would consider obvious the replacement of an atom at  $R^2$  out of the many other possible locations. For instance, the PTO drew particular attention to compound 2, among others, in cited claim 4 that bears a 2-iodo substituent. Yet, this compound, as with many others recited in claim 4, bear at least 9 positions including  $R^2$ , but often far more, where an atom can be replaced by one of the recited halogen isotopes. Absent some reason why tinkering with  $R^2$  is an obvious choice, the PTO’s rejection cannot stand.

For at least these reasons, claim 1 is patentably distinct over cited claim 4 of the '800 patent and, hence, there can be no obviousness-type double patenting issue. Accordingly, Applicants respectfully urge the PTO to reconsider and withdraw this rejection.

The PTO objected to claims 2-27, which are allowable but for their dependence upon rejected claim 1. A satisfactory resolution of the obviousness-type double patenting rejection above should moot the present objection.

\* \* \*

Applicants believe that the present application is now in condition for allowance. They request therefore favorable reconsideration of the application. Should Examiner Jones believe that a discussion is warranted, she is courteously invited to contact Applicants' undersigned attorney by telephone.

Respectfully submitted,

Date December 18, 2007

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**The Commissioner is hereby authorized to charge any additional fees, which may be required under 37 CFR §§ 1.16-1.17, and to credit any overpayment to Deposit Account No. 19-0741. Should no proper payment accompany this response, then the Commissioner is authorized to charge the unpaid amount to the same deposit account. If any extension is needed for timely acceptance of submitted papers, Applicants hereby petition for such extension under 37 CFR §1.136 and authorize payment of the relevant fee(s) from the deposit account.**